

REMARKS/ARGUMENTS

Claim Amendments

Claims 26-36 are pending. Claim 26 is amended to further define step (f). In step (f), the amended claim states that the membranes are wetted with a cleaning chemical at least once per week with a cleaning chemical as supported by, for example, page 9, line 12 or page 18, line 23 of the application. Step (f) further states that the membranes are wetted with a cleaning chemical at least partially after or while draining the tank of retentate in a first cycle. This amendment is supported by, for example, page 9, lines 19-20; page 10, lines 22-26; and, page 15, lines 20-21 of the application. Claim 28 is amended to state that the steps of claim 26 reduce the rate of a decline in permeability of the membranes between the recovery cleanings as supported by, for example, page 17, line 21 to page 18 line 5 of the application. The Applicants submit that no new matter is added by these amendments.

Double Patenting

A Terminal Disclaimer to obviate a double patenting rejection in view of Application No. 10/461,687 is being filed in a package with this response.

Claim Rejections

All claims were rejected as being anticipated by Smith '479. The Applicants respectfully traverse this rejection and submit that the claims are not anticipated.

The Office Action refers to two parts of Smith, column 10, lines 59-68 and column 11, lines 22-30. Column 10, lines 59-68 are part of the Background of the Invention in Smith '479 and further part of a discussion of that starts at column 9, line 63 about cleaning fibers from the outside. Smith states that these various processes are undesirable, at least because they require draining the reservoir. Column 11, lines 22-30, however, are the start of the Summary of Invention in Smith '479. In this summary, Smith et al. describe, among other things, how their new method involves recycling a cleaning fluid

through fiber lumens at low pressure (column 11, lines 25-29). Smith et al. further state that this is done without draining feed (substrate) from the module. The Office Action reads into this statement a disclosure of every process described anywhere in Smith '479, but in which the module is drained. Reading the document as a whole, however, it is clear that no such disclosure exists. Instead, Smith et al. are merely making two points of comparison between their process and the prior art process described in column 10. The two points are that the Smith '479 processes involve cleaning from the lumens, whereas the prior art involved cleaning from the outsides of the fibers, and that the Smith '479 processes do not involve draining the tank whereas the prior art did. A sentence contrasting the Smith '479 process with a prior art process is not a disclosure of every possible combination of a Smith '479 process and a prior art process.

Part (f) of claim 26 requires that the membranes be wetted with a cleaning chemical at least once a week after or while draining the retentate from a tank. This requires the tank to be drained of retentate at least once a week as well. Neither the prior art process of column 10 of Smith '479, nor any process described at column 11 of Smith '479 or later disclose these limitations. Further, wetting the fibers with a cleaning chemical after or while draining the retentate is not what the Office Action, in the Response to Arguments section on page 6, states is taught by Smith. Accordingly, claim 26 is not anticipated by Smith '479.

Claim 27 states that step (f) of claim 26 is repeated between once per day and once per cycle, the cycle including draining the tank of retentate and being performed at least once a day. Logically, these limitations require that the tank be drained at least once per day. This limitation is not disclosed anywhere in Smith '479, and particularly not in Figure 6 or column 13, lines 50-57, cited in the Office Action, which relate to an example in which the tank was not drained at all.

Claim 28 refers to a combination of recovery cleanings to increase the permeability of the membranes and the cleanings of claim 26, which are performed at least once a week during or after the tank is drained of retentate, and wherein the steps of claim 26

reduce the rate of a decline in permeability of the membranes between the recovery cleanings. No combination of all of these elements is disclosed in Smith '479. The citations in the Office Action merely describe examples of fibers being fouled and then cleaned, which is insufficient to describe the claimed combination of elements.

Regarding claims 29 and 30, the Applicants do not agree that the references to Smith '479 anticipate the additional limitations in these claims. Further, all of the cited references are to processes in which the cleaning fluid is used while the membranes are fully immersed in substrate. There is no disclosure in Smith that these same parameters should be combined or used with a process as in claim 26.

Regarding claim 31, the Office Action cites column 1, lines 18-22, but that passage relates to "inside-out flow" modules which are irrelevant to the present claims and to the Smith method itself. Figure 4, also cited in the Office Action, relates to only a 17 day trial and is not connected to any process to be repeated to produce the process of claim 31. *In re Boesch* and the other cases cited in the Office Action relate to obviousness and do not provide a *prim facie* case for anticipation.

Regarding claim 32, the Office Action recites a case relating to apparatus claims, but claim 32 recites a process. Further, Smith does not disclose the use of an oxidant cleaning chemical when purifying ground water.

Regarding claim 33-36, the Office Action does not provide evidence of disclosure of the limitations in these claims in combination with their antecedent claims. Claim 35 also recites "mixing a cleaning chemical into the flowing water". The Applicants submit that this clearly indicates that the cleaning chemical is added to the water while it is flowing and not previously while the water was in a tank.

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For the reasons given above, the Applicants submit that the claims are allowable.

Respectfully submitted,

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